# Visual Communication Design as a form of public pedagogy

Meghan Kelly Deakin University

This paper identifies visual communication design as a form of public pedagogy. Communication design practices aim to achieve the successful transmission of a message to a recipient in a visual mode. *Understanding the theories and practices of visual communication* design can assist in enhancing the reception of the communication, as these practices become a tool to increase the effectiveness of learning in a public space. To demonstrate this, I will use the example of museums as an informal place of public learning, and argue design, and in particular visual communication design strategies, are extremely important in the creation of successful learning. If participants are not engaged or entertained, their capacity for learning will diminish. Engagement depends on the representation of the information and the successful interpretation of that information by the visitor. Further, this paper will emphasise the vital role communication design plays in all forms of public pedagogy, not just within the museum context. However, non-designers create many public learning environments and although this paper argues the benefits of communication design to increasing the effectiveness of learning, it recognises the narrow opportunities of applying this knowledge.

## Introduction

Visual communication design acts as a form of public pedagogy. Communication design aims to achieve the successful transmission of a message in a visual mode and as such forms a synergy with learning practices. When creating a form of communication, understanding the principles of design can enhance the reception of the communication, which will, in turn, increase the learning of the recipient. This paper will begin with an explanation of public pedagogy and design, followed by a demonstration of the relationship between visual communication design and learning as revealed in museum exhibition strategies. Drawing on the shift in focus of museum studies from that of curatorial control to one of the visitor experience, improvements made to the design of exhibitions and visual communication approaches can be seen to impact positively on engagement and the interest of visitors, increase learning. This paper will argue that these connections can be extended to other forms of public pedagogy but limitations exist when much of the creation of public pedagogy is by the public itself and commonly not design driven.

Public pedagogy is an area of research that examines the educative force of media, popular culture and society and the diverse ways in which culture functions as an educative entity (Biesta, 2013). This may include learning in libraries and museums, through popular culture, media and commercial spaces or via the Internet. In addition to this, activist sites and social movements fit the framework of public learning (Sandlin, Schultz, & Burdick, 2010). Spaces that shape a person and are locations of learning can involve the home, family, culture, sub-culture and community. It may include devices that send messages to individuals through television, movies, games, books and magazines. All hold an educative responsibility beyond traditional schooling, impacting adults, community and popular culture, while influencing outlook and opinions (Sandlin et al., 2010:14). Learning can occur anywhere at any time and is determined by the physical setting, the social interactions, personal beliefs, existing knowledge and attitudes of the person.

There are no clear definitions of the term public or of the boundaries that separate the idea of public from the private. The public, for instance, does not exist without private citizens (Roberts & Steiner,

2010:21). Savage posits that the term public in public pedagogu refers to the accessible general population, those citizens who either by choice or through incidental exposure are able to consume what is available to them (Savage, 2010:106). Yet to assist with how one might understand the term public in public pedagogy and to appreciate what kind of learning can be enacted in the interest of the public, Biesta (2013:16) identifies three categories of public pedagogies; "a pedagogy for the public, a pedagogy of the public and a pedagogy for publicness". Investigating this further, pedagogy for the public is pedagogy aimed at the public and is based on instruction. Pedagogy of the public is a pedagogy created by the public. Pedagogy for *publicness* is a pedagogy enacting an interest in human togetherness or an activist form of pedagogy being typically experimental and demonstrative in nature. This paper will reflect further on these categorisations demonstrating their usefulness in explaining variations of communication design effectiveness in public learning. It identifies where designers have limited input in the creation of the learning collateral, for example in the category pedagogy of the public, there will be a reduction in the impact of communication design theories and practices on learning.

Design as a discipline crosses many subject and discipline areas and is embedded in countless facets of life (Fuad-Luke, 2009). The focus of this paper will be on one area of design, visual communication design, traditionally referred to as graphic design. Peuersson, defines visual communication design as "the art and craft of bringing a functional, aesthetic, and organised structure to groups of diverse elements" (2004:8). Designers make a difference; they know how to make things look appealing and are experts in imaginative communication that can work with a broad audience as they channel social discourse into the public domain, offering cultural representations to the broader public. Presented in a positive sense, design can be considered as a problem solving tool and a visual language with the ability to activate "a critical sensibility instead of merely triggering buying impulses" (Bruinsma, 2002:59). People generally understand that design adds value just as people generally value appearances and effective communication (Povnor, 2001). Products have been enhanced, organisations have grown and cultures have developed as a result of what design can offer. "The world outside design heard the message and design literacy is at an all time high" (Poynor, 2001:115). The fundamental premise is design

is important to enhance the effectiveness of communication, increasing the capacity of the recipient to engage with the information and learn from the communication. For this reason, visual communication design can be identified as a form of public pedagogy.

## **Designing learning in museum spaces**

The strong connection between visual communication design and learning can be demonstrated in museums, where design strategies are recognised as essential to creating engaging visitor experiences. There has been a shift in focus of museums from a location of collecting and classifying content, to a place for communication and learning, dialogue and debate (Insulander & Selander, 2009:8). Museums have moved beyond a place for learning facts or skills into a place for learning about identity and the representation of self (Charitonos, Blake, Scanlon, & Jones, 2012:805). As Witcomb describes it, there is a shift in focus from objects to people (2014:50). This emphasis on user-centred engagement has resulted in a transformation of design processes and communication strategies within museums (Charitonos et al., 2012:805). Therefore as Duke identifies, "the aim of museums should not be to create lessons, but rather to create thoughtfully designed learning experiences" (2010:272).

The transformation of museum focus has led to increasing opportunities for visitors to choose what they want to experience and how they wish to engage with artefacts. Visitors now seek instant access to information and a personalised, customised, individualised experience. Learners have a desire to feel in control of activities, test ideas by performing experiments, ask questions, collaborate with other people and seek out new knowledge. Museums provide a location where visitors come with the intention of participating in an education experience in a social context and are stimulated through activities that are directed by the visitor (Fontaine, 2014:52). In our complex world where social, political and environmental difficulties are often contradictory and multi-layered, museums are places for people to engage with these difficulties and learn about them (Duke, 2010:277).

Although formal institutionalised learning still occurs in museums, they are also defined as informal learning spaces. Informal learning can be classified as learning that has occurred by default as a result of daily work-related, family or leisure related activities (Halliday-Wynes & Beddie, 2009:2). "When visitors are in museums, they expect to have enjoyable and intrinsically motivating experiences, experiences that include learning" (Perry, 2012:40). Learning originates and is processed through curiosity, observation and activity (Königschulte, Araújo, & Erb, 2010; Ramey-Gassert, 1997). Individuals do not recognise much of this learning as it is not tested or quantified in any formal arrangement. It is difficult to determine results of informal learning due to the continuous, ongoing nature, and stimulating active engagement without definable, assessable outcomes (Halliday-Wynes & Beddie, 2009:7).

Much of the literature surrounding public pedagogy in museum engagement discusses the multimodal means by which museums endeavour to create entertaining, informal ways for learning. The challenge is to find a balance between the entertainment requirements of visitors and the educational role of the museum (Stogner, 2009:386) understanding that "everyone engages with an experience much more fully if they've invested in to it and they enjoy it" (Fellows, 2011:129). With this in mind, Bautista (2013:8) acknowledges the 'bumpy' road to finding the balance to achieving greater inclusion and also acknowledges the efforts of museums as they continue to respond to the diverse and competing voices that form the stakeholder base.

## Design impacts on representation.

The shift of museum practices from pure content delivery to a focus on engagement and learning for the visitor highlights the need to consider design practices to achieve effective communication. Designers consider the visual representation of the information and the interpretation of that representation to ensure the visitor receives the intended message. In museum practices, representation is the creation of a constructed image negotiated between the curator and the designer (or design team) as they create the outward visible sign to form the depiction the visitor will engage with. Visitors make their interpretation based on that composed image, and as a result, meaning is created through both processes (Diamantopoulou, Insulander, & Lindstrand, 2012:12). The aim of the visual communication is for the visitor, who will engage in his or her own meaning making in response to the exhibit, to receive the intended message defined by the curator and created by the designer.

The question becomes how one can determine success in achieving the desired transmission of information.

These primary concerns of representation and interpretation embed design as a major consideration to effective learning in museum public spaces. Yet, there are two challenges impacting on the relationship between representation and interpretation, each of which design practices can address. The first is understanding where representation is positioned in the timeline of culture, a transitional ever changing narrative, and the second is addressing the diversity of the audience who will engage with the information.

To begin with, museum curators and designers must contend with both the shared understanding of culture and the constant transition of cultural identity in their representation of history and then the subsequent interpretation by the visitor. Stuart Hall (1997) notes that the relationship between history and cultural identity can be explicated in two ways. The first is in terms of one shared culture and a collective view formed through a shared history and ancestry where history plays a role in the creation of culture. Cultural identities reflect common codes. and historical experiences that shape our meaning and frame our terms of reference. Secondly, while cultural identity shares many points of similarity there are also points of difference reflecting what a culture has become. The ongoing interplay of history, culture and power create a constant transformation, positioning people within the narratives of the past and the future. The past continues to influence a culture and impact on the politics of positioning and understanding of identity. Museums, therefore, operate on multiple levels to preserve views embedded in complex, partial visions of the world where only a section can be illustrated at any one time. This may also be influenced by historically defined educational mandates of the museum predetermining representations (Trofanenko, 2006:310).

In addition, museums must respond to the needs of a hugely diverse audience with varying ages, educational levels and experiences and therefore each with unique approaches to meaning making. The communication strategy created needs to resonate with all user groups (Fontaine, 2014:50) understanding that much of the behaviour of visitors who attend museums is reactive as they unconsciously respond to space, colour, shape and form; essentially the design of the exhibits (Falk & Dierking, 2000:113). The dramatisation of the presentation using these elements, and including a variety of materials, lighting, explanatory devices and guidance systems, influences how the visitor will engage and respond to the content. The central goal is to seduce the audience and offer a special experience while successfully transmitting the intended communication (Schittich, 2009:9).

This significant shift of focus by curators and designers to that of user engagement is also reflected in changes in the practices of visual communication design. In 2006, Katherine McCoy introduced this emphasis to design practices when she referred to the nature of changes in the business of design. For over 150 years design worked to satisfy the Industrial Revolution's need for mass communication. Mass production was based on the principle of one product, one communication strategy and all problems solved. "The economies of mass production reduced diversity and individuality but produced lots of affordable goodies" (2006:201). According to McCoy, we are experiencing the end of mass communication, "narrowcasting instead of broadcasting, subcultures instead of mass culture, and tailored products instead of mass production" (2006:201). Diversification, decentralisation, downsizing and disunity have led us to a user centred system with specifically tailored communication processes through precisely tailored channels. As a result, the communication process has changed and the process of sender – message – receiver needs to be reconsidered. Designers must understand their audiences, their needs, their values and their unique methods of communication. No longer can we rely on the mass communication methods for all of the communication design problems we face. Instead we must more closely consider the receiver and use their differences and diversities to enrich the message. Poynor in his book 'Design without Boundaries' states that we need "design that talks to diverse groups in specially made visual languages each group will understand" (Poynor, 1998:28). Communication experts, as with museum experts, must continue to negotiate their way through the myriad of considerations and the broad range of stakeholders, working with design, to achieve effective communication.

Designers are well placed to work with both the creation of representation in the timeline of history and in addressing the diverse

needs of the audience as they are well versed at working with the cycle of cultural production and meaning making. Designers play the role of cultural intermediary in their design practice, a term coined by Pierre Bourdieu (1984) to define a person who holds cultural authority with influence over the tastes, beliefs and understandings of others, determining the representation to be presented to the broader audience. Mills (1963) in his essay entitled *Man in the Middle: the Designer*, discusses the concept of a circuit of culture and explains that the everyday life experiences presented to us are not solid or immediate facts, but constructs delivered by witnesses we have more than likely never met and never shall meet. In other words, our view of reality is not based on pristine experiences as much as it is exposure to culture strategically delivered to us by someone else. Haslem explains: "As communication designers we create a visual text that contributes to the creation of the social world" (2009:25). Matt Soar (2004) revisited the term 'cultural intermediary' when he suggested the graphic designers' role is to expose themselves to the very latest styles, films, books and gadgets and everything that is new in the world and use this information in their own work to communicate and engage a wider audience.

Curators are also defined as cultural intermediaries. The devices used in museum spaces are social constructs, created by someone and interpreted by another. The aim of the curator is to link the vision of the stakeholders with that of the visitors and, through design, complete the circuit of culture. This cycle locates both the curator and the designer as significant participants in cultural production within a museum and with visitor learning.

Moving from the dated method of extraction of knowledge to a more collaborative relationship, the 'First Peoples' exhibition at the Bunjilaka Gallery, Melbourne Museum, which opened in 2000, demonstrates the results of where the lead curator, Genevieve Grieves, was prepared to rethink outdated practices. In this example, power was relinquished to the Indigenous community to determine the representation of Indigenous knowledge, settlement history and the impact this has had on Indigenous and non-Indigenous relations. Recognising that Indigenous culture is something that is continually changing, and diverse, the aim of the exhibition was to clearly represent the strong ongoing and changing connection between people, Country and culture

(Witcomb, 2014:54). Of significance, Witcomb (2014:54) identifies the end result is a well designed exhibition creating a 'pedagogy of feeling' (Witcomb, 2014:49) where Indigenous and non-Indigenous people can come together to learn. The design of the exhibition, that being the structure, labelling, and visual representation of the exhibits, created an experience for the visitor that encouraged an engagement for understanding, pride and awareness in Indigenous culture by both Indigenous and non-Indigenous visitors. The representation, through design, addresses both the historical and visitor diversity inspiring learning.

# Design impacts on interpretation.

The 'First Peoples' exhibition at the Bunjilaka Gallery demonstrates the strong connection between representation and design. Significantly, the interpretation of that representation was as the curator intended. The interpretation of the communication is based on the perception of the museum exhibit and the way in which the visitor understands the communication. Theories of semiotics have proven helpful in addressing the process by which images relate to meaning and can be applied to improve our understanding of how museum exhibitions are engaged by visitors. Semiotics, defined as a research methodology that examines the use of what are called signs to produce meaning, is an analytical approach to the construction and interpretation of visual communication (Barry, 1997:117). Theories of semiotics attempt to view the exchange of communication as an interactive process that involves the production and exchange of meanings between participants (Fiske, 1990). According to Gibson, "human beings are sign-using, sign-generating and sign-interpreting creatures - even though we may not be fully aware of the fact that we are doing so" (1950:210). The linguist, Ferdinand de Saussure, was influential in the development of semiology as a theory of signs. Signs, according to Saussure, acquire meaning through their difference from other signs, the implication being that semiotics is a culturally determined system that will differ across cultures (Berger, 2005:11). Saussure divided signs into two parts, the signifier (the sound or object) and the signified (the concept that it presents). The item of communication, the written, drawn, printed or displayed piece of visual communication, is the signifier. This would include the shapes, lines, colours, textures and layouts used by

the visual communicator to produce the message. Depending on the context in which these signifiers appear and the codes being used in that appearance, the signified or associated message would change. Signs and codes can only be explained in relation to learned and variable cultural rules. Semiology, then, considers communication as a cultural phenomenon (Ashcroft, Griffiths, & Tiffin, 1998:61). This places design under the same umbrella as language, as both disciplines have the meaning of communication socially and culturally constructed and negotiated.

The codification of signs such as words, images and sounds are learnt as we grow up in a culture (Berger, 2005:168). Since all cultural objects convey meaning and all cultural practices depend on meaning, they also make use of signs and underlying codes and conventions. Cultures have a complex set of rules, prohibitions, permissions, values and classifications. Kress (1988:12) explains that these codes appear as normal and natural to the general population. As a result we accept these sets of rules as the natural order of how things should be. It can be said that culture embodies the best that has been thought or said of a group in society maintained through shared values and systems of representation (Hall 1999:2-4). People who share a language, a history and a way of life, have connections that run very deep. According to Usunier (1996:383) our own thought framework is established automatically and unconsciously and reflects the values of our national culture, something we do not choose. This allows us to evaluate people. interpret situations, and defines the attitude we should adopt to communicate and negotiate with others from our culture.

Mental processes allow meaningful connections to be made between what people see and what they understand. The balance between the amount of information offered to the reader and the information required to achieve legibility varies according to the requirements of the communication strategy. "Some types of visual communication clearly need structure and order; signs which because of their practical application need to be read and understood quickly. In other cases where the practical application is less important there are signs which merely seek to give information as opposed to meaning" (Laungani, 2007:165). Crowe (2003) explains the distinction between information and meaning when he clarifies to read a road sign is to understand the

message or a piece of information, whereas, to read a form of visual communication is to respond to the aesthetic qualities and be engaged with the process of interpretation and create meaning. Signs that require a quick understanding and speed in communication must put a priority of information over meaning. Alternatively, signs that open the possibilities of meaning will move away from common and known forms of signs and introduce messages to offer the reader options on how to interpret the communication. The aim is for the recipient to receive and understand the message intended. Any message received that is deemed different to that which was sent is seen as a failure in the communication process and as the fault of the sender who formulated the message (Fiske, 1990).

Insulander & Selander (2009), in their research, investigate the impact of semiotics in exhibitions as museums shift attention from collecting and classifying to exhibition design aimed at enhancing learning and communication. Their research scrutinises meaning making through documenting the interest of visitors and their social interactions in the museum space. Using videos of visitor engagement in the exhibition along with interviews, photographs and the mapping of visitor interest and interactions with each other and the artefacts, their research was able to identify various levels of engagement. As an example, one participant highlighted how he perceived the exhibition design, commenting on the colours and materiality of the exhibition and the positive difference this made to the communication of the exhibits. Others made note of different considerations that they found appealing such as the artefacts on display or their reaction to objects prompted by different semiotic resources in the exhibition. Noted were difficult panels that could not be easily read or complex displays that could not be easily interpreted. The implications of these results highlight the process of transforming signs into meaning, shifting the focus from how the spaces are created to how the visitors receive them. Identified as a shortcoming in this study was the failure of making the connection between the engagement of the visitor and their ability to learn what the curators intended. Instead, the research needs to recognises the interpreter as the determinant of success in the interaction and success occurs when the recipient understands the message the sender intends to deliver as Fiske (1990) has previously identified.

Insulander, in her work with Diamantopoulou and Lindstrand (Diamantopoulou et al., 2012), identifies that 'interest' is a common principle underlying meaning making. The creator of the exhibition chooses the form and meaning of the exhibition based on their own interests and the recipient or visitor brings another set of interests and motivations to the reading of the exhibit. Different technologies and methods of communication offer different possibilities to the reception of the message. As an example, Insulander et.al refer to participants who used an audio guide to assist in their attendance at the museum. The audio guide, created to offer informative information, frames the interests of the visitor by suggesting points to stop and listen, instructs choices and as a result restricts engagement. Other participants, taking a different approach of working through the space and by following their interest, were influenced by the social nature of negotiating their direction with those they came with. As one participant remarked, she was taken by a colourful dress that caught her attention and wanting to share her thoughts and excitement, followed her partner in his direction, thus not taking control over her own progress. In these examples the design created by the curator and curatorial team becomes a prompt for the visitor engagement to establish the framework for visitors to choose their path. Visitors in fact shape their own engagement based on their interest and motivations which are an interpretation of the curator's interests and motivations.

# How the non-designer impacts on public pedagogy.

Each of Biesta's (2013:16) three areas of public pedagogy; for the public, of the public and for publicness, can be analysed in terms of their relationship with design. The discussion of museums fits within the first category of public pedagogy for the public, where learning is created for the public. Designers have a significant role to play in the creation of suitable, engaging spaces to appeal to visitors and increase the effectiveness of learning. Yet, whilst the focus of this paper is on museum spaces and the levels of engagement museums use to create engaging learning environments, it must be understood that these initiatives are not possible for all museums. Smaller community museums are limited in their ability to create strongly designed solutions. Volunteers may be restricted in their capacity to implement long-term strategies and may not create suitable display ideas. "Graphic panels may be over laden with tiny text, or exhibitors may place objects and labels at heights that are not accessible to everyone" (Simon, 2010:296). Design will have a positive impact on learning however, is not always possible to employ design knowledge in every application as the public, who may not be design educated, create many public learning spaces.

Similarly, pedagogy of the public by its nature being created by the public may not recognise the design requirements to engage the variety of stakeholders in learning and would generally not employ the skills, knowledge and practices of professional designers. Local community centres, homes, or the playground, are public spaces where visual communication design knowledge and skills may not impact significantly. In these instances, representation and interpretation are not critical for effective communication and instead the focus may be quick sign reading of information over meaning as explained by Crowe (2003) and Laungani (2007). Outcomes will vary based on the aims of the communication and the level of consideration given to the learner's ability to understand and interpret the information.

The final category identified by Biesta is public pedagogy for *publicness*, acting in the interest of human togetherness and based on activism and change. This category aligns with the practices of design as an agent of change where design practices are employed to create impactful messages. All activists who aim to incite change endeavour to transform their target audience, or larger social groups, by encouraging social, cultural or political transformation (Fuad-Luke, 2009:6). Design is implicitly embedded in the process of questioning and creating change. The ability for visual communication design to make an impact and create innovative solutions to varied problems can also work "to unlock the vast reservoir of human creative potential" (Brown & Katz, 2009:222) and motivate change. The opportunity for socially engaged design, as a form of public pedagogy, is available everywhere as communities create critical mass to address difficult problems (Brown & Katz, 2009:216).

The level of design skills and knowledge required to enhance learning outcomes strongly relates to the level of engagement necessary to communicate with the receiver. Formal learning can be conceived as

constructed, managed and controlled learning with enforced levels of engagement and defined outcomes. Informal learning can be constructed however engagement is not enforced and occurs more by default. As previously presented, museums are considered sites of both formal and informal learning. Offering a different reflection on the type of learning in museum spaces, Falk and Dierking (1992:99) state that informal learning dating back to the 1970s is not a useful term and does not do justice to the complex level of engagement required in museum spaces (Falk & Dierking, 1992:99). A more useful term introduced by Falk (2005:272) is free-choice learning recognising the unique characteristics of learning which can occur in a multiplicity of different settings. Free-choice learning is often non-sequential, self-directed and voluntary as individuals exert choice and control over their learning.

Linking again with Biesta's (2013) categorisations and reflecting on how this may impact on understanding design as a form of public pedagogy, both the definitions of informal learning and free-choice learning work in the context of museums where situations are set in place for visitors to explore and engage with new knowledge at their leisure in both an informal or free-choice manner. Design is used as a means of attracting and entertaining the audience, or as Schittich (2009) explains, seducing the visitor into engaging with the communication. In other pedagogical examples, free-choice learning can be considered a more suitable definition of the process of learning where the public have greater choice and control of their learning and stronger governance of the resources to support this message transfer. In those instances, design practices, although evident, may be difficult to detect.

### Conclusion

This paper demonstrates how visual communication design can be identified as a form of public pedagogy. It puts to the forefront the significant role design plays in assisting learning. Museums understand the importance of design and are increasingly employing design strategies to engage their visitors and consequently increase learning. Applying this knowledge to other areas of public pedagogy would impact positively on learning experiences in the public arena.

However, employing design theories and practices to learning in the public space is not always possible. Identified in this research is the role of the public as an agent of creating the communication for learning. Non-designers are strong contributors to the field of public pedagogy, predominantly creating learning *of* the public. Recognising this leads to two areas for further research; the first investigating the role of the non-designer in public learning, and the second investigating the impact of introducing design knowledge and skills in learning *of* the public and the bearing this may have on the recipient. Having identified the strong link of visual communication design and learning, further investigation into the effectiveness of visual communication design practices in the discipline of public pedagogy will strengthen our appreciation and advance our understanding of public learning environments.

### References

- Ashcroft, B., Griffiths, G., & Tiffin, H. (1998) *Key Concepts in Post-Colonial Studies*. London: Routledge.
- Barry, A. M. (1997) Visual Intelligence: Perception, Image, and Manipulation in Visual Communication. Albany: State University of New York Press.
- Bautista, S. S. (2013) *Museums in the digital age: changing meanings of place, community, and culture* Lanham, Md.: AltaMira Press.
- Berger, A. (2005) *Making Sense of Media: Key Texts in Media and Cultural Studies*. Carlton, Victoria: Blackwell Publishing.
- Biesta, G. (2013) Making Pedagogy Public: For the Public, of the Public, or in the Interest of Publicness? In J. Burdick, J. A. Sandlin, & M. P. O'Malley (Eds.), *Problematizing Public Pedagogy*. Hoboken: Taylor and Francis, 15-25.
- Bourdieu, P. (1984) *Distinction: a social critique of the judgement of taste.* Cambridge, Mass: Harvard University Press.
- Brown, T., & Katz, B. (2009) *Change by design: how design thinking transforms organizations and inspires innovation*. New York: Harper Collins Publishers.
- Bruinsma, M. (2002) Culture Agents. In M. Bierut, Drenttel, W., Heller, S. (Ed.), *Looking Closer Four: Critical Writings on Graphic Design*. New York: Allworth Press, 124-129.
- Charitonos, K., Blake, C., Scanlon, E., & Jones, A. (2012) Museum learning via social and mobile technologies: How can online interactions enhance the visitor experience? *British Journal of Educational Technology*, 43:5, 802-819.

- Crowe, D. (2003) Visible Signs: An introduction to semiotics. Switzerland: AVA **Publishing**
- Diamantopoulou, S., Insulander, E. V. A., & Lindstrand, F. (2012) Making meaning in museum exhibitions: design, agency and (re-)representation. Designs for Learning, 5:1/2, 11-28.
- Duke, L. (2010) The Museum Visit: It's an Experience, Not a Lesson. Curator, 53:3, 271-279.
- Falk, J. H. (2005) Free-choice environmental learning: framing the discussion. Environmental Education Research, 11:3, 265-280.
- Falk, J. H., & Dierking, L. D. (1992) The Museum Experience Washington, D.C.: Whalesback Books.
- Falk, J. H., & Dierking, L. D. (2000) Learning from Museums. Walnut Creek, CA: AltaMira Press.
- Fellows, S. (2011) Elementary, My Dear Visitors: How puzzels, mysteries and challenges can create memorable learning experiences. In K. Beale (Ed.), *Museums at play: games, interaction and learning*. Edinburgh: MuseumsEtc.
- Fiske, J. (1990) Introduction to Communication Studies. London: Routledge.
- Fontaine, L. (2014) Learning Design Thinking by Designing Learning Experiences: A Case Study in the Development of Strategic Thinking Skills through the Design of Interactive Museum Exhibitions. Visible Language, 48:2, 48-69.
- Fuad-Luke, A. (2009) Design activism: beautiful strangeness for a sustainable world. London: Sterling.
- Gibson, J. J. (1950) The Perceptions of the Visual World. Boston: Houghton Mifflin Company.
- Hall, S. (1997) Representation: Cultural representations and signifying practices. London: Sage Publications Ltd.
- Halliday-Wynes, S., & Beddie, F. (2009) *Informal Learning: at a glance*. Canberra: Commonwealth of Australia.
- Haslem, N. (2009) Communication design: towards a 'socially-situated' practice. visual:design:scholarship, Research Journal of the Australian Graphic Design Association, 4:1, 20-28.
- Insulander, E., & Selander, S. (2009) Designs for learning in museum contexts. Designs for Learning, 2:2, 8-20.

- Königschulte, A., Araújo, L. M., & Erb, U. (2010) Integrating an Educational Game in a Museum Exhibition Challenges and Limitations. *Proceedings of the European Conference on Games Based Learning*, 194-200.
- Laungani, P. (2007) *Understanding Cross-Cultural Psychology: Eastern and Western perspectives*. London: Sage Publications Ltd.
- McCoy, K. (2006) Graphic Design in a Multicultural World. In A. Bennett (Ed.), *Design Studies: Theory and Research in Graphic Design*, New York: Princeton Architectural Press, 200-205.
- Mills, C. W. (1963) *Power, Politics and People: The Collected Essays of C. Wright Mills.* New York: Oxford University Press.
- Perry, D. L. (2012) What Makes Learning Fun? Principles for the Design of Intrinsically Motivating Museum Exhibits. Lanham: AltaMira Press.
- Peuersson, R. (2004) Gearing Communications to the Cognitive Needs of Students: Findings from visual literacy research. *Journal of Visual Literacy*, 24:2, 129-154.
- Poynor, R. (1998) *Design without boundaries. Building bridges between theory and practice.* London: Booth-Cibborn Editions
- Poynor, R. (2001) Obey the Giant: Life in the Image World. London: August Media.
- Ramey-Gassert, L. (1997) Learning science beyond the classroom. *Elementary School Journal*, 97:4, 433-450.
- Roberts, P. A., & Steiner, D. J. (2010) Critical Public Pedagogy and the *Paidagogos*: Exploring the Normative and Political Challenges of Radical Democracy. In J. A. Sandlin, B. D. Schultz, & J. Burdick (Eds.), *Handbook of public pedagogy: Education and learning beyond schooling*, New York: Routledge, 20-28.
- Sandlin, J. A., Schultz, B. D., & Burdick, J. (2010) *Handbook of public pedagogy: Education and learning beyond schooling*. New York: Routledge.
- Savage, G. C. (2010) Problematizing "Public Pedagogy" in Educational Reserach. In J. A. Sandlin, B. D. Schultz, & J. Burdick (Eds.), *Handbook of public pedagogy: Education and learning beyond schooling*. New York: Routledge, 103-115.
- Schittich, C. (2009) Designing exhibitions and presentations. In C. Schittich (Ed.), *Exhibitions and displays: museum design concepts, brand presentation, trade show design*. Basel, Switzerland: Birkhauser, 8-9.
- Simon, N. (2010) The participatory museum. California: Museum 2.0.

- Soar, M. (2004) Graphic Design is Immaterial. AIGA Design Forum, viewed 15th September 2006, http://designforum.aiga.org/content.cfm?ContentAlias= getfullarticle&aid=2325495
- Stogner, M. B. (2009) The Media-enhanced Museum Experience: Debating the Use of Media Technology in Cultural Exhibitions. Curator, 52: 4, 385-397.
- Trofanenko, B. (2006) Displayed Objects, Indigenous Identities, and Public Pedagogy. 37:4, 309-327.
- Witcomb, A. (2014) "Look, Listen and Feel": The First Peoples exhibition at the Bunjilaka Gallery, Melbourne Museum. THEMA. La revue des Musées de la civilisation, 1, 49-62.

## **About the Author**

**Meghan Kelly** is a visual communication designer whose experience includes working in the advertising industry, design industry and successfully running her own design studio. Since 2010, Meghan has served as Course Coordinator and senior lecturer at Deakin University in Visual Communication Design. In 2013, Meghan was awarded her PhD examining Cross-Cultural Visual Communication Design exploring issues surrounding identity creation and representation in a cross-cultural context. Her passion for a global understanding of design extends into her teaching practice and continues to be explored in research projects and design opportunities domestically and internationally. Her current interests investigate the intersection of design, museums and public pedagogies.

## Contact details

Dr. Meghan Kelly Visual Communication Design School of Communication and Creative Arts Faculty of Arts and Education Deakin University 221 Burwood Highway, Burwood, VIC, Australia, 3125 Phone: +61 3 9244 6332

Email: meghan.kelly@deakin.edu.au